

PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNA.

REPORT 1545
Supplement No. 2
PAGE 1

MODEL PA-24-260

SUPPLEMENT NO. 2 TO PIPER MODEL PA-24-260 FLIGHT MANUAL

THIS DOCUMENT MUST BE ATTACHED
TO THE BASIC AIRPLANE FLIGHT
MANUAL AND KEPT IN THE AIRPLANE
WHEN THE ITEM OF EQUIPMENT
DESIGNATED BELOW IS INSTALLED.

Approval Basis CAR 3 and
Part 21 Subpart J
May 14, 1969
Piper Model PA-24-260
Equipped with Piper
Altimatec IIIB
Normal Category Only

FAA IDENTIFICATION NO. _____

INSTALLATION OF PIPER ALTIMATIC IIIB

Limitations

ROLL and PITCH "OFF" during take-off and landing.

ROLL, PITCH, and AUTOFLITE "OFF" above 210 MPH.

Operating Instructions

ROLL SECTION

To Engage:

Push console heading lock button (HDG) "OFF".

Center ROLL knob. Push ROCKER switch to "ON" position.

To Turn:

Rotate console ROLL knob in desired direction.

(Maximum angle of bank should not exceed 30°.

Maximum angle will be 20° with heading lock engaged.)

Heading Lock:

Set directional gyro with magnetic compass.

Push directional gyro HDG knob in, rotate to select desired heading. Push console heading lock button (HDG) to "ON" position.

Operating Instructions: (Continued)

ROLL SECTION (Continued)

Roll Section Ground Check:

With heading lock button "OFF", engage ROLL SECTION. Rotate ROLL knob full right and full left. Determine that the control wheel describes a corresponding right and left turn, then center knob and disengage prior to take-off.

PITCH SECTION (ROLL SECTION must be engaged prior to engaging PITCH SECTION)

To Engage:

Push altitude preselect button (ALT) to "OFF" position. Place aircraft in desired pitch attitude manually and rotate pitch command disk to CENTER the trim indicator.

Push PITCH button to "ON" position.

To Change Attitude:

Rotate PITCH command disk in desired direction.

Operating Instructions: (Continued)

PITCH SECTION (Continued)

Altitude Preselect:

To engage Altitude Preselect - With PITCH engage button "OFF" push altitude (ALT) engage button "ON". Rotate altitude selector (Up/Dn) knob to select desired altitude. Manually change aircraft attitude in the direction of the trim indicator. When trim indicator centers, push PITCH engage button "ON".

Calibration of Altitude Selector:

The aircraft altimeter must be used for all altitude references. If altitude preselect dial does not agree with altimeter, rotate the knurled dial manually to insure the preselect dial agrees with the altimeter.

Operating Instructions: (Continued)

PITCH SECTION (Continued)

Pitch Section Ground Check:

With altitude preselect button "OFF", rotate the PITCH command disk full DOWN and full UP. Determine that the control wheel describes a corresponding fore and aft movement, then center the disk and disengage prior to take-off.

AUTOFLITE SECTION

The AUTOFLITE SECTION of the Altimatic IIIB is approved for all attitudes, including take-off and landing. The engagement of the ROLL SECTION of the Altimatic automatically disengages the AUTOFLITE SECTION.

To Engage:

Place AUTOFLITE rocker switch in "ON" position. Correct minor heading variation by rotating AUTOFLITE "TRIM" knob in desired direction.

Operating Instructions: (Continued)

AUTOFLITE SECTION (Continued)

To Turn:

Push AUTO PILOT "OFF" button on control wheel. Make turn manually. Release button to re-engage AUTOFLITE on completion of turn.

PITCH TRIM SECTION:

The airplane can be trimmed (1) Manually with the crank or (2) by actuating the pitch trim switch on the pilot's control wheel. Push switch forward for nose down trim and rearward for nose up trim. Pitch trim is automatically accomplished when the PITCH SECTION is engaged.

With Piper Radio Coupler Installed:

The ALTIMATIC is coupled to the VOR NAV receiver in the modes indicated on the function switch.

In the heading (HDG) mode, the ALTIMATIC is controlled by the directional gyro.

Normal Flight Operation

1. Be sure airplane is properly trimmed. (Ball Centered)
2. Engage AUTOFLITE SECTION.
3. Check vacuum and ascertain that the directional gyro and artificial horizon are functioning properly.

Normal Flight Operation (Continued)

4. Engage ROLL SECTION.
5. Engage PITCH SECTION.
6. Disengage ROLL and PITCH SECTIONS before landing.

With Glide Slope Coupler Installed (Flight)

1. Set Radio Coupler to localizer normal mode
(LOC/NORM)
2. "Engage" altitude hold.
3. Extend landing gear.
4. Adjust power to maintain desired approach speed
110 to 120 MPH.

Emergency Procedures

1. In the event of a malfunction in the ROLL or PITCH SECTION, push the ROLL ROCKER switch "OFF", or push the A/P "OFF" button on the control wheel.

Either operation above disengages both ROLL and PITCH SECTIONS of the ALTIMATIC from the control system and will disengage the AUTOFLITE SECTION if engaged, as long as button remains depressed.

After the A/P "OFF" button on the control wheel has been pushed, the ALTIMATIC IIIB can only be re-engaged by the actuation of the ROLL ROCKER switch on the console.

AUTOFLITE SECTION will automatically re-engage upon release of the A/P button.

Emergency Procedures (Continued)

2. The PITCH TRIM SECTION may be overpowered manually.
In the event of a malfunction in the PITCH TRIM SECTION, pull the Electric Trim circuit breaker.
3. The Altimatec ROLL, PITCH and AUTOFLITE SECTIONS may be overpowered manually.
4. In cruise configuration, Altimatec malfunction with a 3 second recovery delay results in a 30° bank and 150 foot altitude loss.
5. In approach configuration, Altimatec malfunction with a 1 second recovery delay results in a 15° bank and 30 foot altitude loss.
6. In cruise configuration, Autoflite malfunction with a 3 second recovery delay results in a 30° bank and an 50 foot altitude loss.
7. In approach configuration, Autoflite malfunction with a 1 second recovery delay results in a 15° bank and 30 foot altitude loss.

Placards

1. On left control wheel

DWN UP
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Placards (Continued)

2. On left control wheel

A/P OFF ►

3. On instrument panel

Autoflite

Trim

L R

4. On instrument panel (when radio coupler is installed)

A/P NAV SEL

ON

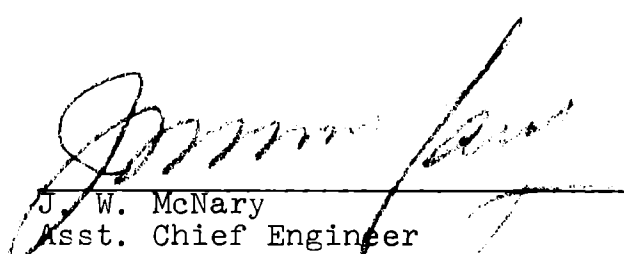
OFF

ON

5. On instrument panel (when Glide Slope Coupler is installed)

G/S

ENGAGED



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Approval Basis CAR 3 and
Part 21 Subpart J
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